# **Public Comment Period on Proposed Update to Hanford Dangerous Waste Permit**

# Proposed Capsule Storage Area

The U.S. Department of Energy Richland Operations Office (DOE-RL) is holding a 60-day public comment period from November 27, 2017, to January 31, 2018, for a Class 3 Permit Modification to the <u>Hanford Dangerous</u> <u>Waste Permit</u>. The modification is needed for the construction and operation of a proposed Capsule Storage Area, which would provide interim dry storage of cesium and stontium capsules currently at the <u>Waste Encapsulation and Storage Facility</u> (WESF).

This fact sheet is for one of two related public comment periods running concurrently. Another fact sheet, located on the <u>Hanford Events Calendar</u>, is for the modifications needed at WESF to facilitate transfer of the capsules to the proposed Capsule Storage Area.

November 2017

U.S. Department of Energy

# **Sequence of Class 3 Permit Modifications**

As per <u>WAC 173-303-830</u>, "Permit Changes," this Class 3 Permit Modification will go through the required public review process that includes this fact sheet, newspaper advertisement, and public meeting.

# **Capsules Background**

From 1974 to 1985, radioactive cesium and strontium isotopes, recovered from high-level waste tanks, were placed in stainless steel capsules and stored in concrete pool cells in WESF, where they remain today.

The waste has been designated as mixed waste and is managed under the *Resource Conservation and Recovery Act of 1976* (RCRA).

The 1,335 cesium chloride capsules and 601 strontium fluoride capsules are currently stored in pools filled with water to protect workers from high levels of radioactivity, and to help keep the capsules cool.

DOE-RL has proposed moving the capsules to interim dry storage at a location to be called the Capsule Storage Area. While the capsules are currently in a safe and compliant configuration, WESF is an aging facility. The possibility of a release of radioactive material from the WESF pool cells exists, should an unlikely event cause the loss of pool water.



**Waste Encapsulation and Storage Facility Capsules** 

# **Public Comment**

We want your feedback on this proposed modification. The public comment period will run **November 27, 2017 to January 31, 2018.** 

A public meeting will be held at 6:30 p.m., Wednesday, December 13, 2017, at the Richland Public Library, 955 Northgate Drive.

# **Summary of Proposed Capsule Storage Area**

DOE-RL is submitting a Class 3 Permit Modification Request to build the proposed Capsule Storage Area. The storage area would be located in the 200 East Area, close to WESF, and would consist of a reinforced concrete pad surrounded by fencing.

At WESF, the capsules would be removed from the pool cells and loaded into concrete and steel casks for interim storage.



Conceptual Capsule Storage Area Illustration

These casks naturally become heated by the cesium and strontium. The cask storage system is designed for "passive cooling" by the airflow within the cask. Cool, clean air is drawn into the cask and warm air goes out, without the need for fans or mechanical equipment. Since the capsules are sealed within the cask and do not come into contact with the cooling air, no radiation is released when the warm air leaves. The same passive cooling approach is used for dry storage of used nuclear fuel at other locations. These concrete and steel casks also provide robust radiation shielding to protect workers and eliminate the possibility of a release of radioactive material.

After being loaded, the casks will be transported to and stored on the concrete pad. The new storage area will not produce any products for use or accept any additional waste. Interim storage at the Capsule Storage Area will continue until a final capsule disposal decision is made. The casks are designed to meet criteria for licensed offsite transportation.

### **Path Forward**

This proposed modification includes a 60-day public comment period, along with an opportunity to learn more at a public meeting. The public meeting will be held on Wednesday, December 13 at the Richland Public Library and will include a questionand-answer session.

DOE-RL recognizes the importance for the public to be informed in a format that provides the entire sequence of activities. To fully understand the background and details, the meeting will also include a presentation on the related plans for preparing WESF to transfer the capsules. The WESF presentation will begin at 5:30 p.m. and the proposed Capsule Storage Area presentation will follow at 6:30 p.m.



Proposed Capsule Storage Area Location

The permittees' compliance history during the life of the permit being modified is available from the Washington State Department of Ecology's contact person.

Electronic access to the proposed permit modification and supporting documentation is available at the Administrative Record, 2440 Stevens Drive, Richland, WA. The documentation is also available in the Public Information Repositories.

## How to get involved...

A 60-day public comment period on this proposed modification to the *Hanford Facility Site-wide Dangerous Waste Permit* will run from November 27, 2017 to January 31, 2018. The public meeting will be held on December 13, 2017, at the Richland Public Library, 955 Northgate Drive, Richland, WA. The WESF preparations presentation will start at 5:30 p.m. and the Capsule Storage Area presentation will follow at 6:30 p.m.

The DOE-RL point of contact is Rich Buel, <u>Richard.buel@rl.doe.gov</u>, (509) 376-3375. The Ecology point of contact is Stephanie Schleif, <u>Stephanie.schleif@ecy.wa.gov</u>, (509) 372-7929.

Please submit comments on the proposed changes by January 31, 2018, via eComments, to:



CSA: <a href="http://wt.ecology.commentinput.com/?id=ibkWY">http://wt.ecology.commentinput.com/?id=ibkWY</a> or mail to: Daina McFadden
Washington State Department of Ecology
3100 Port of Benton Boulevard
Richland, WA 99354

Supporting Documentation: http://www.hanford.gov/pageAction.cfm/calendar?&IndEventID=8720

#### Electronic access is available for review at the locations listed below

#### HANFORD PUBLIC INFORMATION REPOSITORY AND RESOURCE CENTER LOCATIONS

#### **Portland**

Portland State University Library Branford Price Millar Library 1875 SW Park Avenue Portland, OR 97201

Attn: Bertrand Robinson (503) 725-4128

Map: http://bit.ly/1K7BfuK

#### Richland

U.S. Department of Energy Public Reading Room Washington State University, Tri-Cities Consolidated Information Center, Room 101-L 2770 University Drive Richland, WA 99352

Attn: Janice Parthree (509) 375-7443

Map: <a href="http://bit.ly/1LpZKUa">http://bit.ly/1LpZKUa</a>

#### **Ecology Nuclear Waste Program Resource Center**

3100 Port of Benton Blvd. Richland, WA 93354

Attn: Teresa Booth 509-372-7950

Online: <a href="http://www.ecy.wa.gov/programs/nwp/commentper">http://www.ecy.wa.gov/programs/nwp/commentper</a>jods.htm

#### Seattle

University of Washington Suzzallo Library 4000 15<sup>th</sup> Avenue NE Seattle, WA 98195

Attn: Hilary Reinert (206) 543-5597 Map: http://bit.ly/1QMtUog

#### Spokane

Gonzaga University Foley Center Library East 502 Boone Avenue Spokane, WA 99258

Attn: John Spencer (509) 313-6110 Map: http://bit.ly/1Cp0mRT

#### **Administrative Record**

2440 Stevens Center Place, Room 1101 Attn: Heather Childers (509) 376-2530 Online: http://pdw.hanford.gov/arpir/

#### **Hanford Events Calendar:**

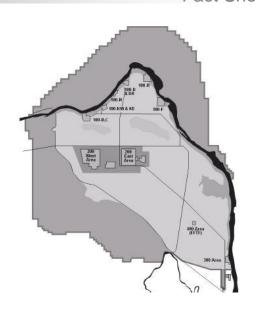
http://www.hanford.gov/pageAction.cfm/calendar

#### **Hanford Public Comment Opportunities:**

http://www.hanford.gov/page.cfm/Outreach/PublicCommentOpportunities

# Hanford Public Involvement Opportunity

We want to hear from you on the proposed modification for the Hanford Sitewide Permit!



Comment Period: November 27, 2017 – January 31, 2018

Public Meeting: December 13, 2017, 6:30 p.m.,

**Richland Public Library**